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AUTHOR McDowell, Earl E.  
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ABSTRACT

A study focused on graduate teaching assistants' (GTAs') perceptions of aspects of teaching and teaching style. Subjects, 120 of 197 randomly selected GTAs in 20 academic departments in a midwestern university, completed two survey instruments. Results indicated that GTAs perceive that students learn more from the lecture method and that interpersonal relationships play a significant role in their teaching. GTAs rated the style variables "friendly," "communicator image," "impression leaving," "attentive," and "animated" more positively than other style variables. Gender differences indicated that males used the lecture method and used more dominant and precise styles in their teaching, while females felt more committed to teaching and were more informal, friendly, and open toward students. Younger teachers seemed to take less pleasure in teaching, were less secure, viewed themselves as followers, and felt more comfortable using the lecture method. Findings suggest that GTAs use a variety of opinions of aspects of teaching variables and teaching style variables. (Contains 20 references and 5 tables of data.) (RS)

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toward Aspects of Teaching and  
Teaching Style

Earl E. McDowell  
Department of Rhetoric  
University of Minnesota  
St. Paul, Minnesota  
55108

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## An Exploratory Study of GTAs' Attitudes toward Aspects of Teaching and Teaching Style

### Abstract

This study focused on GTAs' perceptions of aspects of teaching and teaching style. The results indicate that GTAs perceive that students learn more from the lecture method and that interpersonal relationships play a significant role in their teaching. GTAs rated friendly, communicator image, impression leaving, attentive, and animated more positively than other style variables. Gender differences indicate that males use the lecture method and use more dominant and precise styles in their teaching, while females feel more committed to teaching and are more informal, friendly, and open toward students. Differences among years of experience groups and age groups also are discussed in this paper.

The importance of the dynamic communication process between faculty members and students has been discussed by a number of researchers. Chickering (1979), for example, concluded that interaction between faculty and students helps students to develop intellectual competence, to experience academic achievement, to obtain advanced education, and to develop career goals. In addition, a series of studies by Pascarella and his associates (1976, 1977, 1978, 1978) concluded that an informal classroom setting is particularly suited for faculty influence on students' attitudes, values, and behaviors and helps to develop higher levels of academic and social integration.

Other research by Andersen (1979) defined a good teacher as one who produces positive outcomes in the affect, behavioral, and cognitive domains which are termed teaching effectiveness variables. She concluded that significant positive relationships exist between immediacy variables (nonverbal cues) and affect and behavioral variables, but no relationships exist between these variables and cognitive learning. Other research by Tomita and McDowell (1981) reveals that graduate teaching assistants (GTAs) have positive perceptions of their willingness-to-communicate with students and their ability to develop clear content and presentation. Female GTAs were more confident in their communication with students than male

GTAs. In another study Andersen, Norton, and Nussbaum (1981) suggested that teachers who are more immediate have more positive perceptions of their communication styles and have more interpersonal solidarity with students. Students perceived that five styles (e.g., dramatic, open, relaxed, impression leaving, and friendly) separate good teachers from better teachers. McDowell (1984, 1988) studies discovered that faculty members use impression leaving, precise, friendly, attentive, animated, and communicator image most frequently in interacting with students in informal communication situations. Male faculty members rated friendly and attentive significantly higher for undergraduate advisees

Montgomery (1977) and Norton and Pettigrew (1979) developed a review of literature on communication style focusing on differences between gender groups. The review indicated that males have a more dominant communication style, are more contentious, use more hostile verbs, and are more assertive than females (Eakins and Eakins, 1978). Other results, reported by Cashell (1978) revealed males are more precise as they focus on instrumental, objective, analytical, and problematic aspects of situations, whereas females focus on socio-emotional aspects. Aires (1978) concluded that males engage in dramatizing, storytelling, jumping from one anecdote to

another and receive comraderie through the sharing of closeness and laughter. Females, on the other hand, utilize open, friendly, animated and attentive, using a wider range of nonverbal expressions of emotions.

With the exception of Tomita and McDowell study (1981) limited attention has been paid to GTAs' perceptions of teaching. Many studies have been completed on GTAs' teaching training (Trank, 1986; Humphreys, 1987; Spooner & O'Donnell 1987; Bort & Buerkel-Rothfuss, 1991; Gray & Buerkel-Rothfuss, 1991). GTAs are a primary source of instruction in required courses at colleges and universities throughout the United States. Limited research has been completed to determine the GTAs' attitudes toward teaching responsibilities. Gray and Buerkel-Rothfuss (1991) designed a survey to measure GTAs' attitudes toward the following aspects of teaching: 1) teaching as obligation, 2) teacher as buddy, 3) teacher as personality, 4) teacher as follower, 5) teacher as facilitator, 6) teacher as researcher, 7) teacher as lecturer, and 8) teacher as omniscient. Although their study was exploratory and was designed to correlate attitude measures with teaching responsibility variables (e.g. classroom management, implementing policies, handling student-teacher conflict), these attitude variables seem to be related



to the teaching style of the GTA. This study was designed to discover the relationships among teaching style and teaching attitude variables, as well as differences between gender groups, teaching experience groups, and age groups.

## RESEARCH QUESTIONS

Specifically, this study was designed to answer the following research questions:

1. How do GTAs rate the aspects of teaching variables?
2. How do GTAs rate the teaching style variables?
3. What are the relationships among teaching style variables, among attitudes toward various aspects of teaching variables, and between sets of teaching style variables and aspects of teaching variables?
4. Will there be differences among gender groups in rating teaching style variables and aspects of teaching variables?
5. Will there be differences among teaching experience groups (1-2, 3-5, and 5+) in rating teaching style variables and aspects of teaching variables?
6. Will there be differences among age groups (21-25, 26-35, 35+) in rating teaching style variables and aspects of teaching variables?

## PROCEDURES

Thirty-two academic departments from a midwestern university were randomly selected from the student/staff directory. The directors of graduate studies in these departments were called and asked to indicate the number of GTAs in their departments. After knowing the number of GTAs in the departments, twenty departments were randomly selected and were sent a specific number of questionnaires. The questionnaire included the Teaching Style Instrument, Aspects of Teaching Instruments, and a demographic sheet. A cover letter and questionnaire were placed in each GTA mailbox. The cover letter explained that GTAs were randomly selected to share their perceptions of their roles as teachers, and they were requested to complete and return their questionnaires to the directors of graduate studies in their departments.

## INSTRUMENTS

### *Communication Style Instrument*

The Communication Style Instrument, developed by Norton (1978), was used in this study. The revised form was developed by McDowell (1984). The teaching style instrument consists of 44 items, 11 subconstructs: impression leaving, contentious, open, dramatic,

dominant, precise, relaxed, friendly, attentive, animated, and communicator image. Each subconstruct consists of four items which subjects rated from 1 to 5 using the Likert Scale from strongly agree through strongly disagree.

### *Aspects of Teaching Instrument*

The instrument, developed by Gray and Buerkel-Rothfuss 1991, consisted of 22 items evaluated using a five-point agree-disagree scale. The 22 attitudes were factor analyzed using an orthogonal rotation procedure. Based on the analysis eight independent factors were combined using factor scores. The factors were labeled teacher as obligation, teacher as buddy, teacher as personality, teacher as follower, teacher as facilitator, teacher as researcher, teacher as lecturer, and teacher as omniscient. The *teacher as researcher* variable was not used in this study.

### STATISTICAL ANALYSIS

Several types of statistical analyses were completed on the data. Initially the mean and standard deviation for each style and aspect items were completed. Pearson product moment correlations were completed to determine relationships among style variables, aspect variables, and among both sets of variables. Canonical

correlations were completed between style and aspect variables.

This correlation procedures answer the following two questions: 1) to what extent can two variables be predicted or explained by another set of two or more variables? 2) What contribution does a single variable make to the explanatory power of the set of variables to which the variable belongs? Through the statistical process of canonical correlational analysis the linear relationship between two sets of variables can be determined.

Discriminant analyses also were completed on the data for the following independent variables: gender, teaching experience, college group, and age. This statistical technique maximizes differences between groups on variables included as predictors. Discriminant weights are used to maximize separation, and when linearly combined they differentiate groups. A stepwise function analysis is employed in this study. Initially, the best discriminant variable is selected. Next, a second variable is selected from the remaining variables using criteria that would improve the multivariate F in combination with the first. This process continues until all significant variables are selected.

## RESULTS

GTAs in all 20 department responded to the survey. If all GTAs would have responded there would have been 197 participants. A total of 120 GTAs (61%) completed and returned the research instruments (Gender: male=55, females=65); Years of experience: (1-2=67, 3-5=32, and 5+=21); Age: 21-25=65, 25-35=33, and 35+=22).

GTAs' attitudes toward teaching are reported in Table 1. The results indicate that graduate teaching assistants rated *teacher as lecturer*, *teacher as personality*, and *teacher as follower* more positively than other aspect variables. In contrast, GTAs rated *teacher as omniscient* and *teaching as obligation* the lowest.

The results, reported in Table 2, indicate that GTAs rated *friendly*, *communicator image*, and *impression leaving higher* than other style variables, while *contentious*, *dominant*, and *open* were rated the lowest.

The correlation results are reported in Table 3. Basically, the relationships among attitudes toward teaching variables are low, accounting for a small percentage of the variance (.16). Significant positive relationships ( $p > .05$ ) do exist between *teacher as personality* and *dominant*, between *teacher as follower* and

*dominant*, between *teacher as facilitator* and *teacher as omniscient*, between *teacher as lecturer* and *dominant*, between *contentious* and *dominant*, between *open* and *friendly*, between *open* and *animated*, between *dramatic* and *friendly*, between *dramatic* and *attentive*, between *dramatic* and *animated*, between *dramatic* and *communicator image*, between *relaxed* and *friendly*, between *relaxed* and *attentive*, between *relaxed* and *communicator image*, between *friendly* and *attentive*, between *friendly* and *animated*, and between *friendly* and *communicator image*. Canonical correlations were computed between aspects of teaching variables and communication style variables. No significant relationships exist between the two sets of variables.

The results, reported in Table 4, indicate that significant differences ( $p < .10$ ) occurred between gender groups on *teacher as lecturer*, *open*, *friendly*, and *attentive*. Significant differences ( $p < .05$ ) also occurred among years of experience groups on *teacher as buddy*, *teacher as facilitator*, and *dramatic*. Finally, many significant differences occurred among age groups on *teaching as obligation*, *teacher as personality*, *teacher as follower*, *teacher as facilitator*, *teacher as lecturer*, and *dominant*.

Post hoc analyses using the Scheffe procedure reveals that significant differences occurred between the 3-5 and 5+ years of experiences groups for *teacher as buddy* and between the 1-2 and 5+ groups on *teacher as omniscient*. Significant differences also occurred between the 21-25 and 35+ groups on *teacher as obligation*, *teacher as follower* and *teacher as lecturer*. In addition, significant differences occurred between the 21-25 and 26-35 age groups on *teacher as follower*.

## DISCUSSION

An interpretation of the results of GTAs' attitudes toward aspects of teaching indicates that 70 percent feel their students learn more from lectures than other teaching methods, while 50 percent feel that the personality of the teacher, interpersonal relationships (teacher as buddy) with students play significant roles in their teaching. In contrast, approximately 30 percent of GTAs feel that they would not admit to students if they were wrong and 40 percent feel their own graduate work is their primary responsibility.

The results of the communication variables indicates that between 60 to 80 percent of GTAs rated friendly, communicator image, impression leaving, attentive, and animated more positively than the other style variables, while approximately 60 percent were

less likely to use contentious, dominant, open, and dramatic styles.

These results are similar to McDowell's 1984 study.

An interpretation of the results indicates that about 50 percent of GTAs do not rate themselves positively on the dramatic, open, and relaxed styles. Andersen, Norton, and Nussbaum (1981) concluded that these variables, as well as friendly and impression leaving, separate good teachers from better teachers.

Few significant differences occurred between gender groups in rating the aspects of teaching variables and communication style variables. Males rated *teacher as lecturer* significantly higher, while females rated *teacher as buddy* and *teacher as obligation* somewhat higher. Females also rated *open*, *friendly*, and *attentive* significantly higher than males. In contrast, males rated *dominant* and *precise* somewhat higher. An interpretation of gender differences on dependent measures indicates that males use the lecture method, a more dominant and precise styles in their teaching than females, while females feel more committed to teaching and are more informal, friendly, and open toward students. Remember these conclusions are not generalizable as the within group variances are higher than the between group variances.

There also were few significant differences among years of

experience groups in rating the aspect of teaching variables and communication style variables. Specifically, the 3-5 years experience group rated *teacher as buddy* significantly higher than the 5+ years experience group, and the 1-2 years experience group rated the *teacher as omniscient* higher than the 5+ group. The results seem to indicate that GTAs with 3-5 years teaching experience develop closer interpersonal relationships with students. In addition, students with more teaching experience are less likely to admit they are wrong than the beginning teacher. Likewise, the 5+ years group use a more dramatic teaching style than the inexperienced teacher.

Overall, an examination of the means for the teaching experience groups seems to indicate that members of the 1-2 years experience group find less pleasure in the activity of teaching, feel that teaching training is not very valuable and feel that courses should be more standardized than the 3-5 years and 5+ years experience groups. Members of the 3-5 years experience group want to develop a personal relationship with students, feel teacher training is important, and are more open and freindly with students. Members of the 5+ years experience group have more confidence to structure a course on their own and feel that students learn best in an environment that is controlled. This group also uses a more dramatic,

dominant, precise styles and are less animated and relaxed than other years of experience groups.

Tables 4 and 5 also report several significant differences among and between age groups on dependent measures. Significant differences occurred on five of the seven aspect variables. The 21-25 age group rated *teacher as obligation* and *teacher as lecturer* significantly higher than the 35+ age group, while rating *teacher as lecturer* significantly lower than the 35+ age group. The 21-25 age group also rated *teacher as follower* significantly higher than the 26 to 35 age group. These results basically reinforce the teaching experience results. That is, younger teachers seem to take less pleasure in teaching, are less secure, view themselves as followers, and feel more comfortable using the lecture method. Younger teachers also use less dominant, dramatic and precise styles and are less concerned about communicator image and impression leaving than other age groups.

The results of this exploratory study indicate that GTAs use a variety of opinions of aspects of teaching variables and teaching style variables. It is encouraging that 60 percent of GTAs want to establish personal relationships with their students (teacher as buddy) and take pleasure in the activity of teaching (teacher as obligation).

Likewise, over 60 percent of GTAs rated impression leaving, friendly, attentive, animated and communicator image very positively. The results, also seem to indicate as experience increases GTAs' perceptions of positive aspects of teaching and communication style increase.

Overall, the results of this study might be used as a base to explore other research questions such as the following:

1. Do GTAs who teach different subjects rate the aspects variables and style variables differently?
2. Do GTAs who teach at different undergraduate levels rate the aspects variables and communication style differently?

Finally, Gray and Buerkel-Rothfuss (1991) suggest that GTAs might be prescreened on aspects of teaching variables. Teaching training could then be geared to specific needs of GTAs. The communication style instrument could also be used to assess beginning GTAs' perceptions of the eleven style variables. A training session could be developed to help beginning GTAs to use friendly, dramatic, open, relaxed, and impression leaving styles. In short, both of the instruments can be used to help GTAs develop positive attitudes about the aspects of teaching, as well as develop the ability to use the ideal communication styles in the classroom.

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Table 1

Ranking of GTA Attitudes toward Teaching  
(Based on Grand Mean)

- 
1. Teacher as Omniscient
  2. Teaching as Obligation
  3. Teacher as Facilitator
  4. Teacher as Buddy
  5. Teacher As Follower
  6. Teacher as Personality
  7. Teacher As lecturer
- 

Table 2

Ranking of Teaching styles Variables  
from Most Important to Least Important  
(Based on Grand)

- 
- 
1. Friendly
  2. Communicator Image
  3. Impression Leaving
  4. Attentive
  5. Animated
  6. Precise
  7. Relaxed
  8. Dramatic
  9. Open
  10. Dominant
  11. Contentious
-

Table 3  
Correlation matrix

	oblig	buddy	p	fol	fac	lec	mis	leave im...
oblig	1							
buddy	.052	1						
p	-.224	.148	1					
fol	-.274	-.064	.185	1				
fac	.299	.027	-.273	-.363	1			
lec	-.385	.101	.213	.355	-.345	1		
omis	.165	-.07	-.127	-.17	.343	-.206	1	
leave imp...	.11	.055	-.112	-.135	-.119	-.058	.088	1
cont	-.174	.085	.142	.197	-.312	.19	-.211	.119
open	.177	.092	-.027	-.182	.226	.081	.188	.134
dram	.199	-.046	.004	-.073	.082	-.025	.18	.065
dom	-.081	.162	.338	.274	-.283	.346	-.153	.102
precise	-.11	.026	.054	.151	-.255	.249	.08	.211
relaxed	.171	-.11	-.183	-.164	.067	-.097	.086	.142
friendly	.212	.041	-.178	-.112	.143	-.112	.223	.142
att	.246	-.154	-.184	-.047	.056	-.187	-.005	.03
animated	.244	.063	-.003	-.021	.153	-.098	.189	.102
com image	.197	.053	.037	-.063	.026	-.087	.117	.207

Table 3 (continued)

		Correlation matrix							
		cont	open	dram	dom	precise	relaxed	friendly	att
cont		1							
open		-.133	1						
dram		-.148	.34	1					
dom		.313	.164	.165	1				
precise		.262	-.117	.077	.246	1			
relaxed		-.21	.018	.166	-.055	.145	1		
friendly		-.298	.381	.514	-.109	-.011	.301	1	
att		-.196	.075	.317	-.059	.176	.321	.372	1
animated		-.205	.371	.348	.01	-.007	.183	.312	.235
com image		-.093	.228	.34	.153	.004	.387	.432	.261

Table 4

Significant Differences Between Gender Groups  
Among Years of Teaching Experience Groups  
and Among Age Groups on GTA Attitudes  
toward Teaching and Teaching  
Style Variables

IV	Dependent Variables	F- Value	P
Gender	Teacher as Lecturer	4.29	.05
	Open	2.68	.10
	Friendly	2.24	.10
	Attentive	2.53	.10
Yrs of Experience	Teacher as Buddy	3.20	.04
	Teacher as Facilitator	3.49	.03
	Dramatic	4.14	.01
Age	Teaching as Obligation	3.94	.02
	Teacher as Personality	3.42	.04
	Teacher as Follower	11.57	.0001
	Teacher as Facilitator	3.27	.04
	Teacher as lecturer	5.50	.005
	Dominant	3.29	.04

Table 5  
Scheffe Procedures for Years of Experience Groups  
And Age Groups

IV	Levels	Dependent Variable	F-Value	P
Yrs. of Experience	3-5 vs 5+	Teacher as Buddy	3.183	.05
	1-2 vs 5+	Teacher as Omniscient	3.312	.05
Age	21-25 vs 35+	Teaching as Obligation	3.66	.05
	21-25 vs 26-35	Teacher as Follower	4.92	.04
	21-25 vs 35+	Teacher as Follower	9.694	.001
	21-25 vs 35+	Teacher as Lecturer	5.276	.01